Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2866,

Name: MD 147 over HAYSTACK BRANCH

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

Reviewer, OPS: Anne E. Bruder Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze Date: 3 April 2001

Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number BA-2866

SHA Bridge No. 3091 **Name:** MD 147 over Haystack Branch

Location:
Street/Road Name and Number: MD 147 (Harford Road)

City/Town: Mt. Vista **Vicinity** X

County: Baltimore

Ownership: X State_County__Municipal__Other

This bridge projects over: __Road__Railway X Water__Land

Is the bridge located within a designated district:__yes X no

_NR listed district_NR determined eligible district
_locally designated_other
Name of District

Bridge Type:

_Timber Bridge
_Beam Bridge_Truss-Covered_Trestle
_Timber-and-Concrete

_Stone Arch

_Metal Truss

_Movable Bridge
_Swing__Bascule Single Leaf_Bascule Multiple Leaf
_Vertical Lift_Retractile_Pontoon

_ Metal Girder
_Rolled Girder _Rolled Girder Concrete Encased
_Plate Girder _Plate Girder Concrete Encased

_Metal Suspension

_Metal Arch

_Metal Cantilever

X Concrete
X Concrete Arch _Concrete Slab_Concrete Beam
_Rigid Frame

_Other Type Name_____

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Describe Setting:

Bridge 3091 carries MD 147 over Haystack Branch. MD 147 runs in an east west direction and crosses northern flowing Haystack Branch. MD 147 (Harford Road) is a major corridor between Baltimore City and Baltimore County with a great degree of commercial and residential development. However, at this junction there is limited development .

Describe Superstructure and Substructure:

Bridge 3091 is a single-span, filled spandrel concrete arch bridge built in 1915. The bridge is 48 feet long with a clear span measuring 32 feet. The arch has a rise of 4 feet 9 inches. There is a clear roadway width of 22 feet, with an overall bridge width of 23 feet. According to a 1997 inspection report, the concrete arch has random cracks with efflorescence, exposed reinforcement bars, and some pop-outs. In addition, there is severe scaling with exposed concrete aggregates and partially exposed reinforcement bars with signs of rust. There are map cracks with efflorescence and random spalls. The bridge is in fair condition with a sufficiency rating of 63.2.

This bridge has a solid panel type railing. This type of reinforced concrete railing consists of vertical post securely fastened by dowels to the structure, horizontal balustrades and solid panels filling the space between the posts and the railing. There are four parapets on either side of the bridge with incised end posts. The outer posts are 3 feet wide while the inner posts are 1 foot in width. The parapet is 2 feet 2 inches tall with an 8-inch cap. There are two sections of panels connecting the parapets, each incised 2 inches. Each incised section of the panel is 2 feet by 4 feet with both panels forming a 13-foot section between the parapets. In addition, there is an 8-inch ledge extending beneath the parapet.

The outside faces and the bottom line of the railing are spalling, exposing aggregates and rusty reinforcement bars along the ledge edges. There are horizontal cracks on the outside faces. On the inside faces, there is concrete surface erosion and spalling. The intermediate posts have spalls at the bottom, exposing aggregates and some reinforcement bars.

The abutments are 5 feet by 25 feet. The abutments are directly below the springline. There is heavy concrete erosion on both abutment faces exposing aggregates on the water or bottom line.

The spandrel walls have heavy spalling with exposed reinforcement bars, and efflorescence on the eastern side of the bridge. On the western side of the bridge the spalling extends 4 inches along the southeast edge, exposing aggregate. This side of the bridge also has surface spalling, surface erosion and random cracking with efflorescence.

Discuss Major Alterations:

There have been no major alterations to this bridge. However, in September 1995 the State Highway Administration provided stream control to prevent further scour of the abutments with the use of grout bags.

History:
When Built: 1915
Why Built:. Expansion of Harford Road from Baltimore to Bel Air
Who Built: State Roads Commission
Why Altered: N/A
Was this bridge built as part of an organized bridge building campaign?. No, this bridge was not built as part of an organized bridge building campaign.

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Surveyor Analysis:

This bridge may have NR significance for association with:

_X_ A Events _ Person

_X_ C Engineering/Architectural

The bridge was determined eligible by the Interagency Review Committee in June 1996.

Was this bridge constructed in response to significant events in Maryland or local history?

Yes, the State Roads Commission was engaged in the construction of mainline truck roads that would connect the state's county seats and major transportation hubs. Work on 6 roads within Baltimore County was undertaken concurrently with work in Baltimore City. Coordination between the two jurisdictions was needed to insure correct alignments of bridge approaches and surfaces. As a result, the State Roads Commission used almost identical bridge plans as the City. In some cases an expensive construction cost was unavoidable. This parallel construction with Baltimore City reduced the available funds for the county. As a consequence, the work was confined to 6 roads located within a short distance of the City limits.

One of these 6 roads was Harford Road. Harford Road was also known as the Baltimore to Bel Air Road. The improvement of this corridor was at the heart of the "Seven Year Plan". Beginning in 1908 a contract was let on sections of Harford Road from the City Limits to Taylor Avenue (about 3 miles). Although only a 3-mile section of the road was paved and graded, the replacement of timber bridges along the corridor would fell within the scope of the "Seven-Year Plan."

Bridge 3091 represents a non-standardized design by the staff of the State roads Commission. By 1915, standard plans had been made for all bridges with spans up to 36 feet in length. It was necessary only for the Resident Engineer (Districts were known as residences) to investigate the foundations, and then to refer to the standard plan and select the type of foundations that would fit the location and conditions. However, concrete slabs and girders as well as arches over 36 feet were designed for individual situations in 1915.

Bridge 3091 is just north of Bridge 3093, crossing Long Green Creek. The two bridges are of the same design and were constructed at the same time.

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

No, this bridge is not located in an are that is eligible for historic designation as a district.

Is the bridge a significant example of its type?

Yes, this bridge is an example of a State Roads Commission design prior to the creation of standardized plans for arches.

Does the bridge retain integrity of the important elements described in the Context Addendum?

The bridge retains integrity of the character defining elements of a concrete arch, including its wingwalls, abutments, spandrel walls, and parapets. The bridge retains integrity of location, design, setting, materials, workmanship, feeling, and association. However, the bridge does have serious problems.

Should this bridge be given further study before significance analysis is made and why?

No this bridge should be given further study.

BA-2866

Bibliography:
County inspection/bridge files _____ **SHA inspection/bridge files** X
Other (list):

Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland.* Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

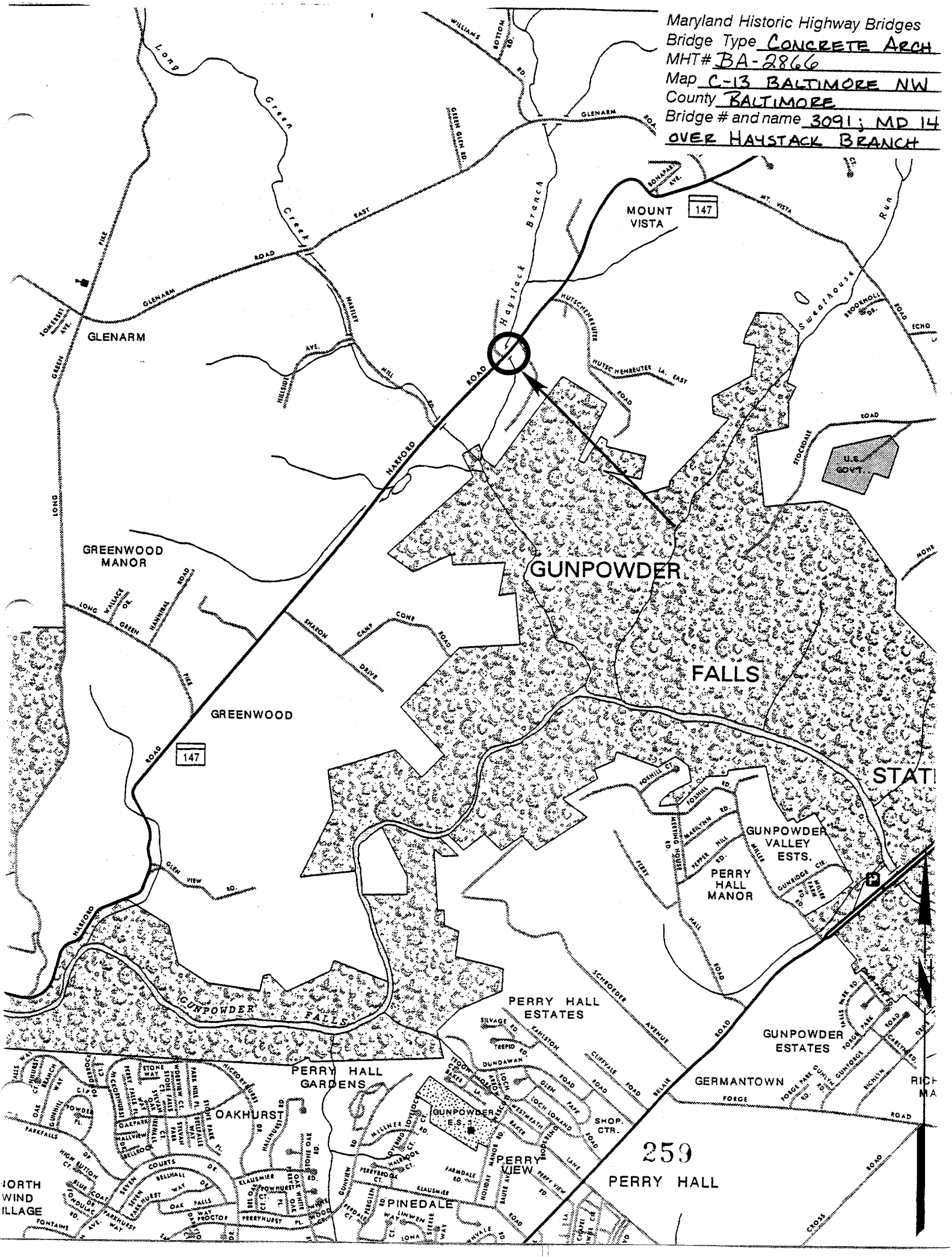
P.A.C. Spero & Company and Louis Berger & Associates
1995 Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

State Roads Commission
1958 *A History of Road Building in Maryland.* State Roads Commission of Maryland, Baltimore, Maryland.

Tyrrell, H. Grattan
1909 *Concrete Bridges and Culverts for Both Railroads and Highways.* The Myron C. Clark Publishing Company, Chicago and New York.

SURVEYOR:

Date bridge recorded December 1997
Name of surveyor Wallace/Montgomery & Associates / P.A.C. Spero & Company
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1635 **FAX number** (410) 296-1670


Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# BA-2866
Map C-13 BALTIMORE NW
County BALTIMORE
Bridge # and name 3091; MD 14 OVER HAYSTACK BRANCH
MOUNT VISTA
147
GLENARM
GREENWOOD MANOR
GREENWOOD
GUNPOWDER
FALLS
GUNPOWDER VALLEY ESTS.
PERRY HALL MANOR
PERRY HALL ESTATES
PERRY HALL GARDENS
OAKHURST
PINEDALE
PERRY VIEW
GUNPOWDER ESTATES
GERMANTOWN
SHOP. CTR.
GUNPOWDER E.S.
259
PERRY HALL
U.S. GOVT.
Haystack Branch
Green Creek
Long Green
Gunpowder Falls

Inventory # BA-2866

Name 3091 - MD 147 OVER HAYSTACK BRANCH
County/State BALTIMORE COUNTY / MD
Name of Photographer DAVE DIEHL
Date 1/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

1 OF 4

Inventory # BA-2866

Name 3091- MD 147 OVER HAYSTACK BRANCH
County/State BALTIMORE COUNTY / MD
Name of Photographer DAVE DIEHL
Date 1/95

Location of Negative SHA

Description EAST ELEVATION LOOKING WEST

2 OF 4

Inventory # BA-2866

Name 3091 - MD 147 OVER HAYSTACK BRANCH
County/State BALTIMORE COUNTY / MD
Name of Photographer DAVE DIEHL
Date 1/95

Location of Negative SHA

Description WEST ELEVATION LOOKING NORTHEAST

3 OF 4

Inventory # BA-2866

Name 3091- MD147 OVER HAYSTACK BRANCH

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE AEHL

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING NORTH

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